

### **AMENDMENTS TO THE SPECIFICATION**

At paragraph [0018]: Fig. 3 shows ~~identification of base~~ representative ESI<sup>+</sup>/MS profiles of (A) cytosine propenal and (B) and adenine (B) propenals from DNA.

At paragraph [0021]: Fig. 6 shows ESI<sup>+</sup>/MS profiles for (A) glutathionyl adenine propenal, (B) glutathionyl adenine propenal reduced by AR, (C) adenine formation of base propenal, and (D) adenine propenal and glutathionyl-base propenal reduced by AR.

At paragraph [0022]: Fig. 7 shows (A) HPLC separation of adenine cellular metabolism of base propenal from glutathionyl adenine propenal and adenine propenal, (B) HPLC of metabolites generated in medium from cardiac myocytes, and (C) HPLC of metabolites generated in medium from COS-7 cells.

At paragraph [0024]: Fig. 9 shows that inhibition of AR by tolrestat (A, C) or sorbinil (B, D) prevents reduction of the glutathione conjugate of adenine propenal in cardiac myocytes (A, B) and COS-7 cells (C, D).

At paragraph [0025]: Fig. 10 shows (A) increase in expression of AR 24 hours after transient transfection of COS-7 cells with AR cDNA, and (B) changes in AR activity in COS-7 cells following transient transfection with (C) empty vector, (D) empty vector with sorbinil treatment, (E) AR vector, (F) AR vector with sorbinil treatment, and (G) AR vector with tolrestat treatment.

At paragraph [0026]: Fig. 11 shows (A) HPLC of metabolites in medium from COS-7 cells transfected with upregulation of AR and incubated with adenine propenal, (B) ESI/MS of Peak I from (A), (C) ESI/MS of Peak II from (A), (D) HPLC of

metabolites in medium from COS-7 cells transfected with AR and incubated with adenine propenal and sorbinil, and (E) ESI/MS of Peak I from (D)-enhances reduction of adenine propenal.

At paragraph [0027]: Fig. 12 shows subcellular localization of AR in (A) heavy membrane, (B) light membrane, (C) cytoplasm, and (D) nucleus.

At paragraph [0029]: Fig. 14 shows expression of AR in (A) CEM7, (B) HL60, (C) REH, (D) K562, (E) K932, (F) H82, (G) HeLa, (H) M1, (I) WEHI, (J) FDCP, (K) M24, and (L) NSF.N1.H7 cells different cell lines.

At paragraph [0030]: Fig. 15 shows (1) analogs with substitutions and modifications of the glutathione aldehyde conjugate and (2)-(9) various analogs of glutathione aldehyde conjugate with substitution and functional group interchange on the glutathione glutathione moiety.

At paragraph [0031]: Fig. 16 shows analogs of glutathione aldehyde conjugate with substitutions and modifications of the aldehyde moiety. Other substitutions for R1 and R2 are Adenine, Guanine, Cytosine, Uracil and Thymine.

At paragraph [0034]: Fig. 19 shows glutathione aldehyde conjugate.